

| | Application No. | Applicant(s) | |
|---|--|--|--|
| Notice of Allowability | 09/884,091 | AKIYAMA ET AL. | |
| | Examiner | Art Unit | |
| | Betsy L. Deppe | 2637 | |
| The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this ap or other appropriate communicatio GHTS. This application is subject | oplication. If not included n will be mailed in due course. THIS | |
| 1. This communication is responsive to the communications f | iled 4/8/05 and 6/6/05. | | |
| 2. The allowed claim(s) is/are 1-13 and 15. | | | |
| 3. \square The drawings filed on $___$ are accepted by the Examine | ī. | | |
| 4. ☐ Acknowledgment is made of a claim for foreign priority una a) ☐ All b) ☐ Some* c) ☐ None of the: Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | been received. been received in Application No | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | of this communication to file a reply ENT of this application. | complying with the requirements | |
| 5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give | itted. Note the attached EXAMINERes reason(s) why the oath or declar | R'S AMENDMENT or NOTICE OF ation is deficient. | |
| 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") mus (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date | on's Patent Drawing Review(PTO | Office action of | |
| Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the | 84(c)) should be written on the drawine header according to 37 CFR 1.121 | ngs in the front (not the back) of (d). | |
| 7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I | SIT OF BIOLOGICAL MATERIAL FOR THE DEPOSIT OF BIOLOGIC | must be submitted. Note the CAL MATERIAL. | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4/8/05;6/6/05 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 6. ☐ Interview Summary Paper No./Mail Da 8), 7. ☐ Examiner's Amend | ite | |
| | | | |

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REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: prior art of record does not teach or suggests in combination a transmission apparatus comprised of the second modulation circuit as recited in claim 1, lines 9-14. Furthermore, prior art of record does not teach or suggests in combination a method that (a) receives a pilot signal and auxiliary signal including TMCC information and (b) displays the signal point of the pilot signal and of the auxiliary signal, as recited in claim 10, lines 5-11 and 16-20. Prior art of record also does not teach or suggests in combination a transmission unit that assigns the pilot signal and the auxiliary signal on different positions on the I-Q complex plane as recited in claim 15, lines 3-9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. The drawings were received on April 8, 2005. Figures 3-6 of the drawings are accepted. However, a new replacement sheet for Figure 1 is required. The new replacement sheet should incorporate the correct spelling of "AXIS" instead of showing the "AUXIS" as crossed-out.

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Betsy L. Deppe Primary Examiner Art Unit 2637



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FIG.1

| Q 1 | | | | | | | | | | | | | |
|--------|---|---|---|---------|---|---|----|------------|-------------|---|--|--|--|
| AUX | | | | | | | | | | | | | |
| | ं | ្ | ं | ् | ্ | 0 | 0 | ٥ | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | × | 0 | | | | | |
| | ٥ | ं | ं | \circ | 0 | 0 | 0 | () | | | | | |
| | 0 | 0 | 0 | 0 | ं | 0 | 0 | 0 | a | | | | |
| | ं | ं | 0 | 0 | 0 | O | O | \odot | | • | | | |
| | ं | 0 | 0 | 0 | 0 | ٥ | 0 | ٥ | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | () | \diamond | | | | | |
| | 9 | ୍ | 0 | 0 | ं | 0 | ٥ | • | | | | | |
| AUX | | | | | | | | | | | | | |

△: SIGNAL POINT OF AUXILIARY SIGNAL

♦ : SIGNAL POINT OF PILOT SIGNAL

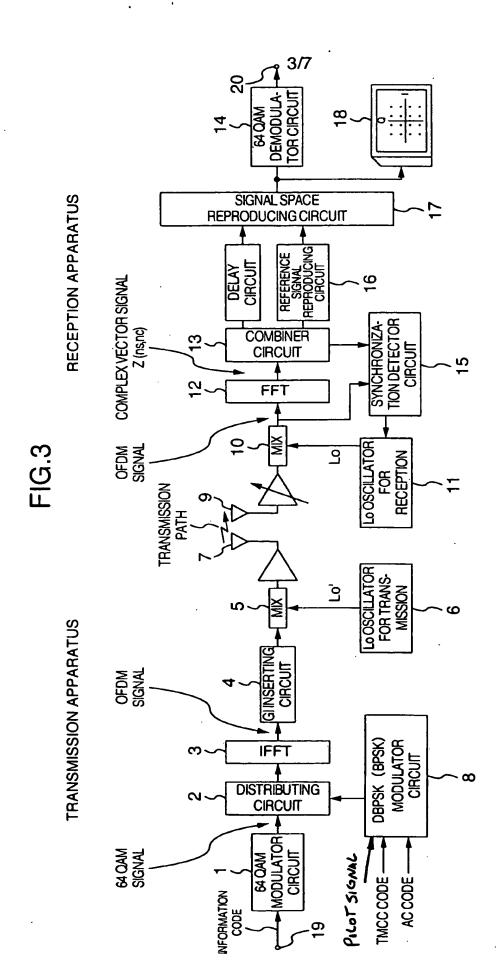
O: SIGNAL POINT OF RECEIVED SIGNAL

×: MOVED SIGNAL POINT OF RECEIVED SIGNAL

1:1-AUXIS-AX15

Q: Q-AUXIS AXIS

Replacement Sheet



Accepted BD Replacement Sheet

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FIG.4

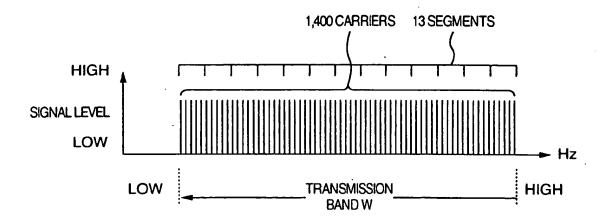


FIG.5 PRIOR ANT

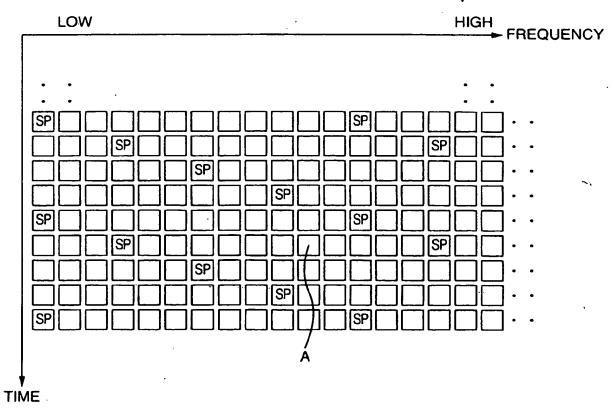


FIG.6 PRIOR ART

